of the Nerves in Acute Ischemia.) M. LAPINSKY (Deutsche Zeitschrift für Nervenheilkunde, Vol. 17, Nos. 5 and 6, p. 323).

The paralysis resulting from acute ischemia has been supposed to be myogenic, and associated with early contracture. Lapinsky has tied the main artery of one of the posterior limbs in ten rabbits, and avoided any pressure upon the limb. The ischemic limb became rapidly paralyzed and cold, the paralysis was flaccid, and passive movements were not restricted. Sensation for pain, touch and pressure, as well as the cutaneous and tendon reflexes, disappeared, and quantitative changes in the electrical responses were obtained. Ischemic contractures did not occur. The microscope showed pronounced parenchymatous neuritis in those cases in which the collateral circulation did not develop until the fourth or fifth day after the operation. The muscles were not normal, but the paralysis was believed to be of nerve origin. SPILLER.

L'ATROPHIE OLIVO-CEREBELLEUSE (Olivary-Ponto-Cerebellar Atrophy). J. DEJERINE ET A. THOMAS (Nouvelle Iconographie de la Salpêtrière, No. 4, July-August, 1900, p. 330).

The purpose of this paper is to attempt to classify the cerebellar atrophies which show certain clinical similarities. Such cases are found scattered through literature. The material of the paper is furnished by two cases, one of which came to autopsy. These cases permitted the study of the symptomatology accompanying cerebellar abscesses, their diagnosis, and some anatomical considerations of the cerebellum and the physiological pathology of the cerebellar syndrome. The two cases showed typical symptoms of cerebellar disease, disturbance of equilibrium in standing and in walking, but with almost absolute integrity in the isolated movements of an extremity, speech disturbances, nystagmus, exaggeration of reflexes, etc. Case I. died suddenly, and a careful microscopic examination of all parts of the central nervous system, illustrated in the article by excellent photographs, is given. The authors sum up their results as follows: The nervous system is in the main small. There exists an atrophy en masse of the cerebellar cortex, more marked in the hemispheres than in the worm, with degeneration and disappearance, in great part, of the afferent and efferent fibers and fibers of projection, with atrophy of the principal nuclei of origin of the efferent fibers, the bulbar olive and the pontine nuclei. Atrophy, less pronounced, of the nuclei of the central gray (dentate nucleus, roof nucleus and "Bouchon" round nucleus). It is a primary cellular atrophy, the absence of vascular alteration, the hemorrhagic foci, and foci of softening, of sclerosis permits this to be affirmed. The topographical anatomical lesions are, first, a total atrophy of the cerebellar cortex; second, total atrophy of the gray matter of the pons, and total degeneration of the middle cerebellar peduncle. Third, the very pronounced atrophy of the inferior olive of the ponto-olive nuclei, archiform nuclei, degeneration of external arcuate fibers and of the corpora restiformia. The pyramids and cerebral peduncles appear smaller than normal, but show no traces of degeneration.

The following classification is proposed. Cerebellar atrophies comprehend two classes, a sclerotic atrophy and a simple degenerative atrophy. The authors agree in general with the results obtained by experimental physiology. The cerebellum as a center of the reflex of equilibruim (Flourens Thomas) is especially favored by the disturbances in equilibrium, locomotion and the relative integrity of isolated movements found in these cases. The asthenia, the rapid fatigue, the slight diminution of tone in certain muscles, more apparent than real, it is true, the oscillations of the body, are all favorable to the theory of Luciani, according to which the cerebellum, in the normal state, exercises upon the rest of the nervous system an influence which can be expressed by a neuro-muscular sthenic tone and static action, that is to say, a complex function by which the cerebellum augments the potential energy at the disposal of the neuromuscular apparatus (sthenic action). It increases the degree of their tension during functional pause (tonic action). It accelerates the rhythm of the elementary impulses during their functional activity and it assures the normal fusion and the regular continuity of acts. The physiological mechanism of the tremor, nystagmus, speech defect, cannot at present be explained. The following general conclusion is advanced by the authors at the end of their paper:

There exists a cerebellar affection characterized anatomically by the atrophy of the cortex of the bulbar olives, of the gray pontine substance, by the total degeneration of the middle cerebellar peduncles, by the partial degeneration of the restiform bodies, by the relative integrity of the central gray nuclei. It is an atrophy which is primary, degenerative and systematic, and not sclerotic nor inflammatory. It is clinically less well marked. It is manifested by the cerebellar syndrome common to all cerebellar atrophies. It is not hereditary nor familiar, nor congenital. It occurs at an adult age. Its etiology is obscure and it is included in the category of primary cellular atrophies. We designate it by the name of olivo-pontine-cerebellar atrophy. SCHWAB.

UN CAS DE PARALYSIE BULBAIRE SUPÉRIEURE CHRONIQUE. (A Case of Bulbar Chronic Superior Paralysis.) CHARLES HUDOVERNIG (Nouvelle Iconographie de la Salpêtrière, 13th Year, No. 5, September-October, 1900, p. 473).

A case of bulbar paralysis of superior type, very chronic in its course, without any complications and absolutely unilateral. Such cases are extremely rare, no similar case having been observed in literature. The case is as follows: A woman, aged seventeen years, had always been well. No family history; no specific or alcoholic history. At the age of eleven years it was noticed that the left eye showed a deviation to the left, which slowly increased in degree, so that it became impossible to move it to the right. At the same time the left eyelid gradually fell, so that it became more and more impossible to open the left eye. For two years the eye had been completely closed and the globe turned outward. Outside of the paralysis referred to, no other condition in respect to the cranial nerves or to the internal organs was at that time found. It is then a question of a young girl seventeen years old, without hereditary or personal antecedants; she enjoyed the best of health until the actual beginning of the disease six years ago. This began with paralysis of the left oculomotor, with deviation of the eye externally. A ptosis developed. All the branches of the third pair gradually became affected. Thus at the end of six years a total ophthalmoplegia was present. In addition to the lesion of the third pair, there was a paresis of the left facial, involving all the muscles supplied by this nerve. There was no evidence of atrophy, or the reaction of degeneration in the region supplied by the nerve.

The following are important from the standpoint of differential